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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/619,478	07/19/2000	Shunpei Yamazaki	0756-2187	1882

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EXAMINER

ANYASO, UCHENDU O

ART UNIT PAPER NUMBER

2675

DATE MAILED: 03/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/619,478

Applicant(s)  
Yamazaki et al

Examiner  
Uchendu O. Anyaso

Art Unit  
2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1) ☒ Responsive to communication(s) filed on Jul 19, 2000

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

## Disposition of Claims

4) ☒ Claim(s) 1-16 is/are pending in the application.

4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 1-16 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirements.

## Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☒ All b) ☐ Some\* c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

15) ☒ Notice of References Cited (PTO-892)

18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

19) ☐ Notice of Informal Patent Application (PTO-152)

17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3, 5

20) ☐ Other: \_\_\_\_\_

DETAILED ACTION

1. Claims 1-16 are pending in this action.

*Claim Rejections - 35 USC ' 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1, 2, 4-7 and 9-16 are rejected under 35 U.S.C. 102(e) as being anticipated by *Sawada* (U.S. 6,078,317).

Regarding independent Claims 1, 6, 11 and 14, *Sawada* teaches a ferroelectric liquid crystal display (4) (column 3, lines 38-40, figure 1 at 4).

Furthermore, *Sawada* teaches an image signal processing circuit by teaching a video signal processor (2) and digital image processor (3) (column 3, lines 38-40, figure 1 at 2).

Also, *Sawada* teaches a control circuit in the form of a display mode dependence controller (17) for setting the gamma characteristic adjustment circuit (19) that is contained within the digital image processor (figure 1 at 2-4).

Furthermore, *Sawada* teaches that the gamma characteristic adjustment circuit (19) adjusts the characteristics included in the RGB image data in correspondence with the display panel (24) by utilizing a look-up table embedded within the gamma characteristic adjustment circuit (19) (column 4, lines 10-24, figure 1 at 19, 24).

Regarding Claims 2, 5, 7, 10, 12, 13, 15 and 16, in further discussion of claims 1, 6, 11 and 14, *Sawada* teaches a ferroelectric liquid crystal display (4) for a computer display (see column 3, lines 38-40, figure 1 at 4, see also column 1, lines 1-19).

Regarding Claims 4 and 9, in further discussion of claims 1 and 6, *Sawada* teaches circuitry wherein the video signal processor and the digital image processor contain the A/D conversion circuit (13) and the gamma characteristic adjustment circuit (19) respectively (column 3, lines 61-67 through column 4, lines 10-24 figure 1 at 13, 19).

#### *Claim Rejections - 35 USC ' 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sawada* (U.S. 6,078,317) in view of *Jeong* (U.S. 6,008,801).

Regarding Claims 3 and 8, in further discussion of claims 1 and 6, *Sawada* teaches circuitry wherein the video signal processor and the digital image processor contain the A/D conversion circuit (13) and the gamma characteristic adjustment circuit (19) respectively (column 3, lines 61-67 through column 4, lines 10-24 figure 1 at 13, 19). However, *Sawada* does not teach a source driver circuit with a D/A conversion circuit. On the other hand, *Jeong*

teaches an invention related to a source driver for a thin film transistor liquid crystal display, which has a digital-to-analog converter (column 1, lines 10-14).

Thus, it would have been obvious for a person of ordinary skill in the art to combine *Sawada* and *Jeong*'s inventions because while *Sawada* teaches circuitry wherein the video signal processor and the digital image processor contain the A/D conversion circuit (13) and the gamma characteristic adjustment circuit (19) respectively, *Jeong* teaches a source driver for a thin film transistor liquid crystal display which has a digital-to-analog converter. The motivation for combining these inventions would have been to reduce the power consumption of the source driver, and thus, reduce the power consumption of the liquid crystal device (column 4, lines 1-5).

### *Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,097,362 to *Kim* for a driver for a liquid crystal display.

U.S. Patent 5,793,334 to *Koyama* for a system for correcting a display device and method of correcting the same.

### *Contact Information*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uchendu O. Anyaso whose telephone number is (703) 306-5934. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras, can be reached at (703) 305-9720.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks


Washington, D.C. 20231

**or faxed to:**


**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

  
Uchendu O. Anyaso

03/08/2002

  
STEVEN SARAS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600